REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS AND AMENDMENTS

Claims 1-27 were pending in this application when last examined.

Claims 1-9 were examined on the merits and stand rejected.

Claims 10-27 were withdrawn as non-elected subject matter.

Claim 1 is amended to clarify the claimed invention. Further, support for the phrase "selected from ... AlcR protein" can be found in paragraph [024] on page 4 of the specification as filed. Also, support for the phrase "*aspergillus nidulans* ... (SEQ ID NO: 2)" can be found in paragraph [042] on pages 7-8 of the specification as filed.

Claims 2-4 and 9 are amended to clarify the claimed invention.

Support for new claim 28 can be found in paragraph [024] on page 4 of the specification as filed.

Claims 5-8 are cancelled without prejudice or disclaimer thereto.

No new matter has been added.

II. CLAIM FOR FOREIGN PRIORITY

Applicants respectfully note that priority under 35 U.S.C. §119 was not fully acknowledged on the cover sheet of the last Office Action. In particular, box 1, 2 or 3 in item 12 was not checked. Applicants respectfully request the Examiner to check one of these boxes in the next Office Action.

III. INFORMATION DISCLOSURE STATEMENT

Applicants note that on February 15, 2008, an IDS with a 1449 Form was submitted to the Office. Applicants have checked PAIR and confirmed such was received. The Examiner is respectfully requested to return an initialed copy of the 1449 Form submitted on this date.

IV. SEQUENCE LISTING

On pages 2-4 of the Office Action, the Office required the specification to be amended to recite SEQ ID NOs for the sequences recited on page 8. It is noted that the specification has been revised as required and therefore this objection is overcome.

Further, the Office required a copy of the sequence listing in paper and computer-readable form which recites all SEQ ID NOs recited in the specification.

Enclosed herewith is a Sequence Listing in both paper and computer readable form as required by 37 C.F.R. § 1.821(c) and (e). Amendments directing its entry into the specification have also been incorporated herein. The content of the paper and computer readable copies are the same and no new matter has been added.

The Sequence Listing has been run through the PTO Checker software (version 4.4.0) and no errors were found.

In view of the foregoing, it is believed that the application is now in compliance with the Sequence Rules under 37 C.F.R. § 1.821-1.825.

V. CLAIM OBJECTIONS

On page 4 of the Office Action, claims 1, 3 and 4 were objected to for the noted informalities. This objection has been overcome, as applied to the amended claims, for reasons which are self-evident.

VI. 101 REJECTION

On page 5 of the Office Action, claims 1-9 were rejected under 35 U.S.C. §101 as drawn to non-statutory subject matter. The claims have been amended to recite "an isolated mammalian cell" as suggest by the Examiner. Thus, this rejection, as applied to the amended claims, is overcome.

VII. INDEFINITENESS REJECTION

On page 6 of the Office Action, claim 1 was rejected under 35 U.S.C. §112, second paragraph, as indefinite for improper antecedent basis. This rejection is overcome, as applied to the amended claims, for reasons which are self-evident.

VIII. WRITTEN DESCRIPTION/ENABLEMENT REJECTIONS

On pages 6-10 of the Office Action, claims 1-9 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Further, on pages 11-15, claims 1-9 were rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for a PCT-amplified promoter from a *A. nibulans* P_{AlcA} using oligonucleotides OWW58 and OWW59 as forward and reverse primers, was not enabled for a genus of promoter regions of *A. nibulans* P_{AlcA}-mediated transactivation in the presence of acetaldehyde, much less a genus of promoter regions of any promoter exhibiting responsive transcription factor-mediated transactivation in the present of any compound being gaseous.

Applicants respectfully traverse these rejections as applied to the amended claims. The RTF is now restricted to the described and exemplified AlcR protein and AlcR protein derivatives. The AlcR derivatives as claimed in claim 1 are easy to prepare according to standard procedures and easy to test whether they fulfill the requirement of "which modulates transcription of operator-containing promoters in response ...", shown in the second half of part a. of claim 1. Applicants also note that the description is also enabling for these derivatives since

their preparation and testing is within the standard methods easily applied by the skilled person in the art.

Applicants further note that they have now restricted part b. of claim 1 to the exemplified functional P_{AlcA} operator site as described in example 1 of the specification in order to expedite prosecution. Hence, the claims no longer encompass modified nucleotides (see page 6 of the Office Action, before quotation of 35 U.S.C. §112).

Thus, for the above-noted reasons, these rejections are overcome.

IX. ANTICIPATION REJECTION

On page 16 of the Office Action, claims 1, 2, 4 and 5 were rejected under 35 U.S.C. §102(b) as anticipated by Berlin et al. (U.S. 6,509,152). Applicants respectfully traverse this rejection as applied to the amended claims.

Applicants note that Berlin et al. describes a protein containing a DNA-binding domain and a second protein comprising a transcriptional activation domain. This reference however does not teach or suggest the particular AlcR protein or derivatives thereof as claimed in amended claim 1. Further, this reference does not teach or suggest the particular P_{AlcA} operator site of claim 1. Thus, Berlin et al. fails to teach each and every element of the claimed invention as required. Thus, this rejection is overcome.

X. OBVIOUSNESS REJECTIONS

On pages 17-19 of the Office Action, claims 1, 2, 4-7 and 9 were rejected under 35 U.S.C. § 103 as obvious over Caddick et al. (U.S. 6,605,754) in view of White (Internet article, November 11, 1999).

Further, on pages 19-21, claims 1 and 3 were rejected under 35 U.S.C. § 103 as obvious over Caddick et al., in view of White and in further view of Flipphi et al. (Biochem. J., 2002, pp. 25-31).

Finally, on pages 21-22, claims 1 and 8 were rejected under 35 U.S.C. § 103 as obvious over Caddick et al, in view of White and in further view of Smits et al. (Plasmid, 2001, pp. 16-24).

Applicants respectfully traverse these rejections as applied to the amended claims. Furthermore, Applicants note in response to the Examiner's indication on page 16 of the Office Action that the claim is interpreted to require both part a and b, that the claim 1 has been amended to recite "and" between parts a and b in order to clarify this claim.

The promoter compromising the particular AlcR-specific OP site derived from P_{AlcA} as described in Example 1 of the amended claims is not obvious over Caddick et al. in view of White, or Caddick et al. in view of White and further in view of Flipphi et al., or Caddick et al. in view of White and further in view of Smits et al.

In particular, the description in White of a potential PhD study project is defective as is pointed out in the background section of the present specification. Please see page 2 of the specification. The project as proposed by White cannot work since ethanol does not induce the AlcA/AlcR system in standard mammalian cell culture. Thus, this reference would lead a skilled artisan away from the present invention. Not only does this reference teach away, but such reference is not enabled and therefore cannot be relied upon to teach the use of ethanol-induced *alc* gene expression systems in mammalian cells. Please see MPEP 2145, paragraph 3-4.

On the other hand, Caddick et al. describe the use of the ethanol-inducible AlcA/AlcR system in tobacco plant cells. This is a general teaching about the AlcA/AlcR system in plants. Thus, the Office contends that a teaching directed towards AlcA/AlcR system in plants in combination with an inoperative suggestion in White that an ethanol-inducible AlcA/AlcR system in mammalian cells, renders obvious the claimed invention. Applicants respectfully disagree. The combination of these two references, as noted above, would not result in an operable system in mammalian cells because mammalian cells cannot utilize ethanol in an AlcA/AlcR system. Furthermore, it is noted that the Office does not contend that these references teach a responsive

transcription factor selected from *aspergillus nidulans* AlcR protein and a responsive transcription factor derived from *aspergillus nidulans* AlcR protein comprising the noted conserved amino acids and identity operably linked to P_{AlcA} operator obtained by amplifying with the noted oligonucleotides. Thus, these references fail to teach or suggest the claimed invention either alone or in combination.

It is also noted that Caddick et al. and White are relied upon by the Office in all the above noted rejections. Thus, all these rejections, as applied to the amending claims, are untenable and should be withdrawn.

Further, Flipphi et al. describe isolation of AlcA and AlcR genes and show that the AlcA/AlcR system is inducible by several primary alcohols, primary monoamines and L-threonine, and corresponding aliphatic aldehydes. A skilled person in the art knowing Flipphi et al. and Caddick et al. and White would still not be guided to the instant invention, because there is no indication or hint how to construct the particular mammalian cell compromising AlcR protein or a derivative thereof and the particular P_{AlcA} operator site of part b. in amended claim 1.

Smits et al. describe the *Pseudomonas putida* promoter P_{alkB}. This promoter is also described in e.g. Example 5, but neither related to nor indicative of the particular P_{AlcA} operator site as claimed in amended claim 1. Smits et al. do not add information relevant for the present invention as claimed and do not make it obvious.

Thus, for the above-noted reasons, these rejections are untenable and should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

Martin FUSSENEGGER et al.

By: _____

William R. Schmidt, II
Registration No. 58,327
Attorney for Applicants

WRS/kh
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
August 29, 2008